**Final Report**

**A Survey for the Fifth Generation Cellular System**

**Overview**

* This is an individual report.
* In this report, you shall present a comprehensive survey about the state-of-the-art of the Fifth Generation (5G) cellular system.
* The outline (and some requirements) of the report is listed below

**Content**

* Cover page
  + Logo of UPRM, Title, Course, Student Name, Student ID, Department
* Table of content
* Introduction
* History and the current status
  + 1G
  + 2G
  + 3G
  + 4G
* Market trends of 5G systems
* Applications of 5G systems
* Key technologies
  + Physical layer
    - Massive MIMO
    - mmWave
  + Data link layer and MAC sub-layer
    - Non-orthogonal multiple access (NOMA)
  + Network layer
    - Software-defined networking
    - Network function virtualization
    - Network slicing
  + Other major issues
    - Network densification
    - Edge computing
    - Internet of Things
    - Cellular vehicular to everything (C-V2X)
* The future of cellular systems
  + Beyond 5G (B5G)
  + 6G
  + AI for cellular system
* Conclusions
* References
  + Need **at least 20** references in the **IEEE style**.